



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,364	11/26/2003	Brian B. Lee	P0004962.00	9986
27581 7590 05/29/2009 MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924				
EXAMINER RAJAN, KAI				
ART UNIT		PAPER NUMBER		
3769				
MAIL DATE		DELIVERY MODE		
05/29/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/723,364

Applicant(s)

LEE ET AL.

Examiner

Kai Rajan

Art Unit

3769

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 - 4, 9, 12, 14, 15, and 26 - 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 - 4, 9, 12, 14, 15, and 26 - 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date 2/26/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ ~~Notice of Informal Patent Application~~
- 6) ☐ Other: _____

DETAILED ACTION

Examiner acknowledges the response filed February 26, 2009.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2 – 4, 9, 12, 14, 15, and 26 – 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilson et al. U.S. Patent No. 5,908,392.

2. A method for storing and processing physiological mechanical data in a medical recording device, comprising:

sampling one or more physiological signals at a selected sampling rate (Column 7 lines 11 – 59);

deriving physiological parameter values from the sampled signal to obtain parameterized signal data at a rate lower than the selected sampling rate of the physiological signal (Column 7 lines 11 – 59);

storing the parameter values as they are determined in a temporary memory buffer for a predetermined storage interval (Column 7 lines 60 – 67, column 8 lines 1 – 64);

determining a statistical aspect of the stored parameter values in the temporary buffer upon expiration of the storage interval (Column 7 lines 11 – 59 detecting events); and

writing the statistical aspect as it is determined for a plurality of the predetermined storage intervals to a long-term memory buffer, the long-term memory buffer storing the statistical aspects for a long-term storage interval, the long-term memory buffer thereby storing statistical aspects having a temporal resolution of the parameter values corresponding to the predetermined storage interval of the temporary memory buffer, further comprising (Column 6 lines 20 – 31, column 7 lines 60 – 67, column 8 lines 1 – 64, column 15 lines 31 – 67, column 16 lines 1 – 49, figures 2 and 3):

allocating the temporary memory buffer into at least two different temporary memory buffers and programming a unique storage interval to each of the two different temporary memory buffers (Column 7 lines 60 – 67, column 8 lines 1 – 64, column 15 lines 31 – 67, column 16 lines 1 – 49, figures 2 and 3).

3. A method according to claim 2, further comprising allocating the long-term memory buffer into at least two different long-term memory buffers each having a unique temporal resolution, wherein the unique temporal resolution of each long-term memory buffer is determined by the predetermined storage interval of a respective one of the temporary memory buffers (Column 7 lines 60 – 67, column 8 lines 1 – 64, column 15 lines 31 – 67, column 16 lines 1 – 49, figures 2 and 3).

4. A method according to claim 3, wherein the at least two long-term memory buffers comprise digital memory buffers (Column 7 lines 60 – 67, column 8 lines 1 – 64, column 15 lines 31 – 67, column 16 lines 1 – 49, figures 2 and 3 the buffers are located within digital memory).

9. A method according to claim 3, wherein the unique temporal resolution comprises at least a one of: a coarse resolution having a relatively low temporal resolution, a medium resolution having a higher temporal resolution than said coarse resolution, and a fine resolution having the highest temporal resolution compared to said coarse resolution and said medium resolution (Column 7 lines 60 – 67, column 8 lines 1 – 64, column 15 lines 31 – 67, column 16 lines 1 – 49, figures 2 and 3).

12. A method according to claim 9, wherein upon expiration of a predetermined storage interval or upon exceeding available memory storage of a given long-term storage buffer the following step is performed:

transferring a set of data comprising the statistical aspect or the stored parameter values from one of said fine resolution and said medium resolution to said coarse resolution and from said fine resolution to said medium resolution (Column 7 lines 60 – 67, column 8 lines 1 – 64).

14. A method according to claim 9, further comprising:
allocating available memory for the stored parameters based at least in part upon a respective temporal resolution assigned to each of the stored parameters, wherein said respective

temporal resolution comprise said coarse resolution, said medium resolution, said fine resolution (Column 7 lines 60 – 67, column 8 lines 1 – 64, column 15 lines 31 – 67, column 16 lines 1 – 49).

15. A method according to claim 14, wherein the allocating further comprises automatic partitioning of available memory based upon the number of stored parameters or the temporal resolution of the stored parameters (Column 7 lines 60 – 67, column 8 lines 1 – 64, column 15 lines 31 – 67, column 16 lines 1 – 49 determining maximum capacity within the temporary buffers).

Claims 26 – 28 are rejected by the computer implemented instructions executing the process disclosed by Wilson et al., as rejected above.

Response to Arguments

Applicant's arguments with respect to claims 2 – 4, 9, 12, 14, 15, and 26 – 28 have been considered but are moot in view of the new ground(s) of rejection.

The Applicant is invited to request an interview to discuss suggestions to advance prosecution of the case.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kai Rajan whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/
Examiner, Art Unit 3769

/Michael C. Astorino/
Primary Examiner, Art Unit 3769

May 26, 2009